



***Naegleria* Infection**

(nuh-GLEER-e-uh)

What is *Naegleria*?

Naegleria is an amoeba commonly found in the environment, in water and soil. Only one species of *Naegleria* has been found to infect humans, *Naegleria fowleri*.

Where is *Naegleria* found?

Naegleria fowleri is found worldwide. Most commonly, the amoeba is found in

- Warm bodies of fresh water, such as lakes, rivers, and hot springs
- Warm water discharge from industrial plants
- Under-chlorinated swimming pools
- Soil

How common is *Naegleria* infection?

Although *Naegleria* is commonly found in the environment, infection occurs rarely. Only 24 infections were documented in the U.S. between 1989 and 2000.

When is *Naegleria* most common?

Infection with *Naegleria* is most common during the dry, summer months, when the temperature is above 80° F and the water is warm and water levels are low.

How does infection with *Naegleria* occur?

Infection with *Naegleria* occurs when the amoeba enters the body through the nose while the person is swimming underwater or diving. The amoeba then travels to the brain and spinal cord.

What are the signs and symptoms of *Naegleria* infection?

Infection with *Naegleria* causes the disease primary amoebic meningoencephalitis (PAM), a brain inflammation, which leads to the destruction of brain tissue. Initial signs and symptoms of PAM include headache, fever, nausea, vomiting, and stiff neck. As the amoeba causes more extensive destruction of brain tissue this leads to confusion, lack of attention to people and surroundings, loss of balance and bodily control, seizures, hallucinations. The disease progresses rapidly and infection usually results in death within 3 to 7 days.

Is there treatment for infection with *Naegleria*?

Several drugs are effective against *Naegleria* in the laboratory. However, although a variety of treatments have been used to treat infected persons, their effectiveness is unclear since most infections have still been fatal. Prompt diagnosis and treatment may help.

Can infection be spread from person to person?

No. *Naegleria* infection cannot be spread from person to person contact.

How can I prevent an infection with *Naegleria*?

- Avoid swimming or jumping into bodies of warm fresh water
- Avoid swimming in thermally polluted water (water around power plants)
- Do not swim in areas posted as "no swimming."
- Hold the nose shut or use nose clips when jumping or diving into bodies of fresh water.
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For further information on protecting yourself from recreational water illnesses, go to www.healthyswimming.org.

Can I get *Naegleria* infection from a swimming pool?

No. You cannot get *Naegleria* infection from a swimming pool as long as the pool is properly cleaned, maintained, and chlorinated.

This fact sheet is for information only and is not meant to be used for self-diagnosis or as a substitute for consultation with a health care provider. If you have any questions about the disease described above or think that you may have a parasitic infection, consult a health care provider.



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